

KARO-ECHO Newsletter 07-04-2018

The KARO ECHO Net meets on 146.415 MHz Simplex each Thursday evening immediately after the West Contra Costa RACES Net, but never before 1900 local time.

The West Costa County ACS/RACES Net meets each Thursday on 145.110 MHz repeater (TX down 600 with PL 82.5) at 1845 local time.

The Contra Costa County HF EMcomm/RACES Net meets each Thursday on 3893 KHz at 1835 local time

KARO-ECHO meets in person at 7:30 PM on the second Monday of each month at the Kensington Community Center, 59 Arlington Ave, Kensington, CA 94707 in the Upper East Room. Ample parking is available. The next meeting is this coming **Monday, July, 9, 2018**.

Congratulations are due to our members Natalie (KM6UCF) and Marlene (KM6UBZ) on achieving their new amateur radio licenses – important additions to our disaster preparedness community! Thank you for your concern and quality effort.

Recruitment

Every KaroEcho meeting that your editor has attended the past 5 years includes the typical whining that we need more hams to support CERT ICPs. We have made some progress; but more is needed. We need a new strategic plan if we truly desire to fill our manpower holes.

Pass the word Saturday 8am – 5pm July 21, Saturday there will be a ham cram and test offered in Burlingame Contact HYPERLINK "mailto:WB6ZBU@ARRL.NET" WB6ZBU@ARRL.NET and see: HYPERLINK "https://drive.google.com/file/d/1R5B_U7VYmm6VkBaVYWCiCDYS-5ZKuGAu/view" https://drive.google.com/file/d/1R5B_U7VYmm6VkBaVYWCiCDYS-5ZKuGAu/view

The Benecia Amateur Radio Club will be holding a 1 day ham class and licensing session on October 6. See: HYPERLINK "http://beniciaarc.com/wp/?page_id=8" http://beniciaarc.com/wp/?page_id=8

KaroEcho is currently negotiating with the City of El Cerrito (thanks to Kevin) for the possibility of obtaining a similar one day venue in El Cerrito proper that can be arranged far enough in advance to widely publicize it through local community newsletters, CERT groups, newspapers, and digital media outlets that cover our area. Recruitment as well as engaging our current and past members should be seen as an essential ingredient – a high priority if we are to reach our service potential.

Action Item: Become a Volunteer Examiner (VE) in the ARRL VEC program. Go to HYPERLINK "http://www.arrl.org/become-an-arrrl-ve" [http://www.arrl.org/become-an-arrrl-](http://www.arrl.org/become-an-arrrl-ve)

[ve](#) and take their open book test.

KAROECHO.NET WEB PAGE

Please visit the new KARO-ECHO Webpage at HYPERLINK "<https://www.karoecho.net/>" <https://www.karoecho.net/> for useful documents and announcements. Note that the old Karo-echo Wiki has been abandoned.

Thanks to Rob, K6RJM, the KARO-ECHO IT manager and webpage master who has created this very fast, easy to use, and very useful page that is populated with all the training information that one needs to be a competent radio operator when a disaster strikes our neighborhoods. .

Especially, check out the EVENTS Page (HYPERLINK "<https://www.karoecho.net/events>" <https://www.karoecho.net/events>) and the WORKSTREAMS drop-down menu which will lead one to an extensive training page that will provide online learning at your own pace. Everything from the very beginning to advanced EmComm operations are detailed. The RESOURCE page has many excellent outside links.

If you are on Facebook, contribute to the Karo-Echo Facebook Page at HYPERLINK "<https://www.facebook.com/groups/1451216838315743/>" <https://www.facebook.com/groups/1451216838315743/>

Proposed AGENDA: KARO-ECHO Meeting July 9, 2018

See the KaroEcho Website Documents and/or Events Page

The meeting will begin promptly at 7:30 PM followed by the approval of the Minutes. Additions to the agenda will be entertained after the proposed agenda is read. Email proposed items to Hal, KK6NDF. Then old business, followed by new business, and followed by the monthly program, a drill, practice, and/or education. Please bring a copy of the proposed agenda to the meeting. The agenda will be uploaded by July 8 and found on HYPERLINK "<https://www.karoecho.net/documents>" <https://www.karoecho.net/documents> under June_2018_Agenda.doc

Hal has planned an exciting and full agenda. We will whittle down the business meeting and focus on the training session this time.

SPECAI: At the July 9 KaroEcho Meeting we will discuss and plan our first field Simulated Emergency Test (SET) since 2015; which is long overdue. We will establish a date, times, locations, scope, and scenario (earthquake) of the SET. Real time problems will come up during these Simulated Emergency Tests (SETs); which allows us to solve them before a disaster occurs. Mere theoretical speculation as to what works and doesn't work is

subject to prejudice, fancy, and lack of experience – mostly folly.

Our SET will be designed to stress test six main areas:

1. Our ability to communicate across Kensington and El Cerrito via 2m simplex using a variety of methods such as HTs, portable external antennas, stations, mobiles, and base stations.
2. Our ability to utilize emergency power systems for sustained durations.
3. Our ability to efficiently activate and be dispatched to designated sites.
4. Our efficiency to change frequencies and act as a relay station between two stations.
5. Efficient net operations procedures
6. Efficient (accurate and speedy) message handling ability

REPORTS and EVENTS

Digital Comm Team and Working Committee is currently composed of KE6BEE (Howdy), K6RJM (Rob), and NI6A (Don). Get your feet wet in this adjunctive field. Marin County, Santa Clara County, and many other Northern California counties have in place error free digital communications systems (packet radio) that can handle formal written traffic efficiently (such as message form 213, etc). We are planning to provide error free digital communications for El Cerrito/Kensington in the event of conventional communications outage. Although already a proven concept, it will be a slow process because most of us are inexperienced newbies. Since digital comms adds a few new components to our radio system, the Kensington/El Cerrito Local Area Net architecture is being formulated through experiential methods at the present.

What is needed to get on packet? A 2m radio, antenna, and a computer plus one additional component. That additional component can be an external sound/switching box such as the Signalink USB and/or a Rigblaster external sound cards; or it can be as simple as a packet TNC-X (\$50). More elaborate systems are not necessary to get on packet, although they may have specialized features.

Infrastructure Work Group

A KaroEcho Diamond x-300a antenna that was installed on a Ken Horn's residence on Lexington in Kensington (now a silent key) has been removed and is planned to be installed at Kensington CERT Area 6 ICP near Colusa Circle. Thanks to Hal, KK6NDF for its transition.

Kevin (KI6KNP) has arranged the take down of the Diamond x-300a antenna at the old senior center. It is being stored at the El Cerrito Corporation yard temporarily, while being destined for installation on the roof of Tassajara Park Recreation Center, the location of CERT Area EC9 ICP. Final arrangements are being coordinated by Mike (KM6CXI) and Kevin (KI6KNP).

The Kenwood TK-760 HG1 45 watt 2m transceiver is being loaned to Rob (K6RJM) for the packet LAN network BBS which hopefully will cover all of Kensington and El Cerrito.

Hal, KK6NDF, is finalizing the KaroEcho equipment spreadsheet (a list of antennas, radios, batteries, power supplies, coax, etc). We need to assign a maintenance schedule to each site, test and maintain the equipment, install adequate laminated instruction manuals at each operating site, equip each site with the basic message forms such as IC-213s, and establish a maintenance log at each location. The technical Infrastructure work group requests your help. Would you adopt an orphaned installation location?

Training Work Group Activity

Rob, has written an excellent "Getting Started" guide for new hams on our web page. See: HYPERLINK "<https://www.karoecho.net/get-involved/getting-started>" <https://www.karoecho.net/get-involved/getting-started>

Also please fill out the JOIN form if you have not done so previously. Find it as a drop down menu under "Get Involved" See: HYPERLINK "<https://www.karoecho.net/join>" <https://www.karoecho.net/join>

A follow-through novice primer has been put on the website for new hams once they have bought their radio and want to learn more. See: HYPERLINK "<https://drive.google.com/file/d/10J-569BRrx5adhA-hJGPeNITU6B9Yi6z/view>" <https://drive.google.com/file/d/10J-569BRrx5adhA-hJGPeNITU6B9Yi6z/view>

Also a new Dual-Band antenna primer for new hams who want to graduate from the rubber-ducky world is at HYPERLINK "https://drive.google.com/file/d/1u_ozABBRYDJDACFJRTV_rxWF1WjCgW_I/view" https://drive.google.com/file/d/1u_ozABBRYDJDACFJRTV_rxWF1WjCgW_I/view

An Elmering/Mentoring Work Group has formed to help newcomers to the hobby to learn the ropes and also to help those with a physical disability to help install antennas. An Elmer is ham jargon for mentor. We all have had one or more.

Thanks to David, KJ6AAT, for his excellent Elmering of Natalie (KM6UCF) this month. Natalie is a CERT graduate and EC9 member, is on the air with a 7 watt HT, and attended the last KaroEcho meeting.

For newbies, please visit HYPERLINK "<https://www.karoecho.net/workstreams/training>" <https://www.karoecho.net/workstreams/training> and read the study materials. It is all there

except for hands-on experience. Ask questions!

KaroEcho Training Work Group interfaces with the Elmering/Mentoring volunteers and has designed a training guide to help members identify what they need to do in order to improve their skills. This guide is broken down to 4 levels. Level A, Advanced Level B, Level C Extra Class, and Level D MAT Trained. What level are you and what is your next step?

HYPERLINK "https://drive.google.com/file/d/1b52QimF_k6WY90aHIPpnoEvmml5cp1pd/view" https://drive.google.com/file/d/1b52QimF_k6WY90aHIPpnoEvmml5cp1pd/view

On every Thursday evening net there will be a training session and/or discussion. Summaries of recent net events are found under our past events page at HYPERLINK "https://www.karoecho.net/events/past-events" <https://www.karoecho.net/events/past-events>

Our Portable and Mobile Capabilities Have Been Enhanced

A portable 50 watt 2 m/70 cm radio station equipped with Anderson Powerpole connectors, including 12v batteries, a folding tripod mast stand, a high gain portable antenna, coax currently being equipped for portable operations capable of communicating anywhere in our Karo-Echo region has reached its final stage of development having received a deep cycle AGM battery and Go-Kit on Wheels carrier.. We will then pack everything together as a complete go-kit and test it sometime in July. We need a few hams willing to set up portable or mobile stations to test our coverage at a few remote Kensington/El Cerrito locations during the test. Volunteers please send an email to HYPERLINK "mailto:NI6A@ARRL.NET" NI6A@ARRL.NET

Ham Class, Exam Preparation, and License Test Saturday, 8 am- 5 pm July 21, 2018 in Burlingame

This is a one day complete ham cram and licensing opportunity. After you pass contact HYPERLINK "mailto:info@karoecho.net" \t "_blank" info@karoecho.net to receive mentoring that will progress into you being a skilled amateur radio operator in our area. HYPERLINK "https://drive.google.com/open?id=1R5B_U7VYmm6VkBavYWCiCDYS-5ZKuGAu" \t "_blank" [See this poster and sign-up](https://drive.google.com/open?id=1R5B_U7VYmm6VkBavYWCiCDYS-5ZKuGAu) Tell your friends.

Radio Mapping of CERT Areas

Karo-Echo is offering radio mapping for FRS/GMRS operations in all K/E CERT areas. EC 4 and EC2 are next in line when they are ready. CERT Areas EC9 and Kensington 6 have already been mapped and have been assigned coordinated frequencies (channels). Let's get this together so that we do not interfere with each other.

Red Flag Fire Patrol 2018

K6RJM (Rob) and David (KJ6AAT) are spearheading a Red Flag Fire Patrol. There may be many additional details such as routes, lookout posts, frequencies, relay procedures, activation methods, and so forth that may be helpful. A Red Flag Fire day is defined by temperatures greater than 90 degrees, humidity less than 12%, and winds greater than 20 mph. Contact Rob (K6RJM) for more info on how you can participate. To subscribe to this new group, send email to HYPERLINK "mailto:fire.patrol+subscribe@karoecho.net" fire.patrol+subscribe@karoecho.net .

To post to the fire patrol group, send email to fire.patrol@karoecho.net

We need a **Net Manager** for the Thursday Night KARO-ECHO Net. Please volunteer at least for one year.

The **Net Manager** shall be appointed by the Board of Directors and shall:

Manage the weekly Net according to guidelines established by the Board

Arrange for Net Control Stations (NCS)

Arrange scheduling of Net Control Stations (NCS) by soliciting volunteers to fill slots at least one week in advance.

Transmit relevant bulletins/announcements on the weekly net.

Receive and archive net session reports regarding the callsigns of check-ins, the total number of check-ins, total time of net, and number of written messages passed. A copy of the weekly archive should be sent to the Emergency Coordinator (EC), KM6HBO.

Report to the membership at regular meetings

Arrange for announcements during the Net of the date, time, and location of the next

Regular or Special or Plenary KARO-ECHO meeting

Follow the recommended standard ARRL Net Management procedures or improve upon them. The Net Manager should send in a weekly report listing the callsigns all check-ins.

The Net Manager may delegate Net responsibility to assistant net managers as desired.

We need to ramp up our **PR/Outreach and Recruitment** efforts and brainstorm new ideas.

A local ham cram and exam is one such tool. We need a free venue to hold the class and exam. Please help us ascertain one.

PR/Outreach and Recruitment Leader -- Duties:

Increase KARO-ECHO membership by recruiting new and old hams to participate in both the KARO-ECHO net and the meetings.

We need a Newsletter Editor. Duties: Produce and distribute a monthly Newsletter before the monthly KARO-ECHO regular monthly meeting containing the meeting announcement (Time, date, and place), the proposed agenda, the minutes of the last meeting, upcoming drills, activities, and related disaster services information.

Please volunteer for Net Control. Why? Because you will be better able to help us help each other in a disaster once you **learn how by doing**.

We also need more volunteers for our **Technical Maintenance Committee** (maintain equipment installations, fix, and install new equipment) at all agency installations. Thanks to Mike, KM6CXI, Frank, K6FAC, Jamuel KM6HBO, and Hal KK6NDF who have been helping out. We can use more team members.

The Recent June 28 Training Exercise

We practiced overloading the primary net frequency and Net Control Operation by artificially creating extra test messages using the KAROECHO modified message format (an all inclusive combo of the ARRL message form (header), while including all the elements and fields of the IC-213). The idea was to storm the NCS with more than a few high priority messages and learn how to move stations off the primary net frequency to pass their traffic, and then return when finished. Due to certain limitations, it was decided to keep the traffic on the primary net frequency.

Special thanks to K6RJM, KE6HCE, K6BEE, KJ6AAT, KJ6WSS, KK6RED, and KJ6BHX for submitting their written copies.

What we learned: Always ask the receiving station if they are ready to copy before sending. Never sacrifice accuracy for speed. When in down slow down. Always drop the PTT button every 10 seconds or more often. Receiving stations should never have to repeat the whole message back for confirmation; but please repeat back for confirmation the specific parts of the message of which you are unsure. Ask for fills, such as, "please confirm XX, word before XX, word after XX, all before XX, all after XX, etc." There were 15 check-ins. Thanks!

Action Item: We will critique the drill on the July 5 Training Net. Of particular note is how to use the ARRL/ARES header on top of the IC-213 form. This improvement of the IC-213 is currently being discussed by FEMA.

Adding the ARRL/ARES header on top of the ICS-213 form would be all that is needed. For us radio ops in the field having a message number and station of origin will help in tracking and servicing a message. The message **precedence** is important in flagging Emergency and Priority traffic. The **word count/check** is for accuracy (missing words due to glitches, static, fading, op error, etc), Locations are helpful when the **From** field name and position is not easily recognized.

The ARRL/ARES form also could use a slight improvement; e.g., the signature should not be considered as a part of the text body. Although it is not counted in the check/word count, it really should be given a field/target by itself (for example the **FROM** Field of the IC-213 would suffice as the signature and what is designated as **"Signature"** in IC-213 should be

changed to “Authorized by (if germane).

While the IC-213 might be straightforward to an office worker, to a radio operator in the field handling tactical and logistics traffic it is definitely problematic and lacking.

See: HYPERLINK "https://drive.google.com/open?id=1x-gpy00hLMpeFJixEPnJdBMRGHxcaaRP" \t "_blank" [Comparing ICS-213 Message Form with the ARRL Message Form](https://drive.google.com/open?id=1x-gpy00hLMpeFJixEPnJdBMRGHxcaaRP) (a very short critique)

HYPERLINK "https://drive.google.com/open?id=1gZAVTnNfhFSm6Iq_8Z1CHahMhrkB0hzM" \t "_blank" [A Breakdown of the Elements of the ARRL/ARES Standard Message Form Made Simple](https://drive.google.com/open?id=1gZAVTnNfhFSm6Iq_8Z1CHahMhrkB0hzM) for Dummies!

HYPERLINK "https://drive.google.com/open?id=1jABS0PnlSRYsuXBLFZX3JUPephytbtwz" \t "_blank" [Obtaining Fills efficiently in Message Handling](https://drive.google.com/open?id=1jABS0PnlSRYsuXBLFZX3JUPephytbtwz) (short easy to understand primer)

HYPERLINK "https://drive.google.com/open?id=1DiKGx4AleKJGEVzbEF7-f33wqPMAYSDG" \t "_blank" [The KARO-ECHO HYBRID ARES/RACES MESSAGE FORM](https://drive.google.com/open?id=1DiKGx4AleKJGEVzbEF7-f33wqPMAYSDG)

Attention to details is essential if we are to provide ACCURATE and EFFICIENT communications for our community and served agencies.

The Annual Field Day event co-sponsored by the East Bay Amateur Radio Club and NALCO ARES/RACES at Caesar Chavez Park in Berkeley was great fun as usual. We ran emergency power, erected high gain portable antennas, and managed to have much fun.

KaroEcho members KK6ZPM, KJ6WSS, and NI6A were among the participants. Jim (K6APW) and myself (NI6A) worked the high speed Morse Code tent racking up over 100 contacts in a few hours once we got the hang of the computer logging program (N1MM+). It was a real pleasure watching Jim work his sidewinder (bug) at 35 WPM. Jim, licensed in the early fifties, has one of the best fists I have ever heard. The HF bands were excellent. Most of the contacts were on the east coast all the way from Maine down to Florida, across the South to Texas and as far South as Chile.

Please send in your reports and news to your newsletter editor HYPERLINK "mailto:NI6A@ARRL.NET" NI6A@ARRL.NET

Note: See the **KARO-ECHO Agenda** for our upcoming Monday, July 9, 2018 Meeting see: HYPERLINK "https://www.karoecho.net/events" <https://www.karoecho.net/events> the

agenda will be made available by the Sunday before the meeting.

Also all recent KAROECHO **Newsletters and Minutes** will be found at our documents page: HYPERLINK "https://www.karooecho.net/documents" <https://www.karooecho.net/documents> .

Past Minutes are also found on our past events page <https://www.karooecho.net/events/past-events>

The KARO-ECHO **Net Control Protocol and Net Log** (for Net Control Stations, rev). See: HYPERLINK "https://docs.google.com/document/d/14t56EyuLyaZnp_UwjGkxldX65RSdjlg1FSyD5zKbghg/edit" https://docs.google.com/document/d/14t56EyuLyaZnp_UwjGkxldX65RSdjlg1FSyD5zKbghg/edit

If you desire to be removed from this email list, please email Don, NI6A at HYPERLINK "mailto:NI6A@ARRL.NET" NI6A@ARRL.NET

73!